



**Directive-Type Memorandum
(DTM) 09-027**

**Implementation of the Weapon
Systems Acquisition Reform Act
of 2009**

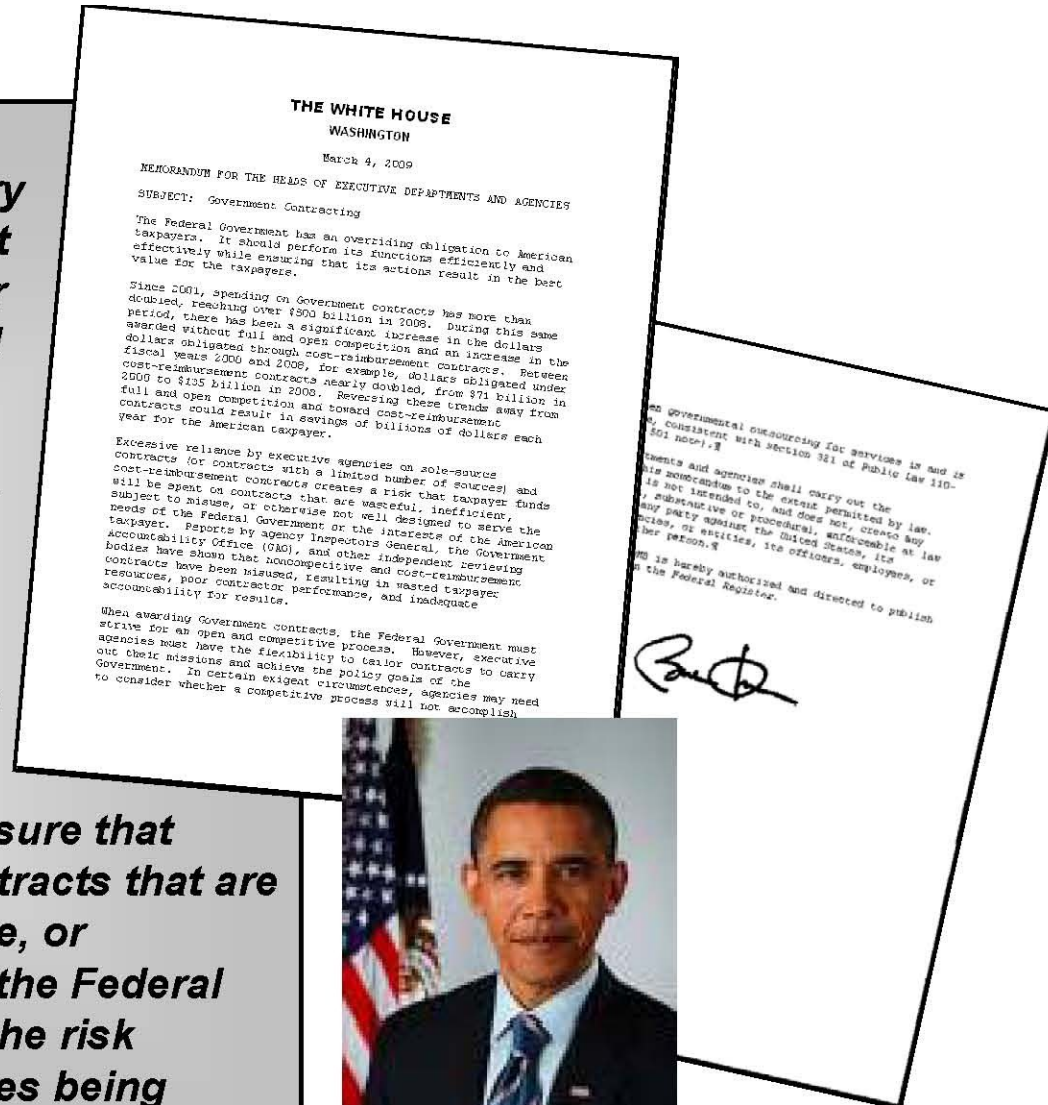
(Public Law 111-23)
4 December 2009

Bradford Brown
**Director for Acquisition
& Program
management**

Presidential Direction

“ . . . it is essential that the Federal Government have the capacity to carry out robust and thorough management and oversight of its contracts in order to achieve programmatic goals, avoid significant overcharges, and curb wasteful spending. A GAO study last year of 95 major defense acquisitions projects found cost overruns of 26 percent, totaling \$295 billion over the life of the projects. Improved contract oversight could reduce such sums significantly.

“ . . . the Federal Government shall ensure that taxpayer dollars are not spent on contracts that are wasteful, inefficient, subject to misuse, or otherwise not well designed to serve the Federal Government’s needs and to manage the risk associated with the goods and services being procured. . . .



Secretary of Defense Direction

Chief among institutional challenges facing the Department is acquisition

“First, this department must consistently demonstrate the commitment and leadership to stop programs that significantly exceed their budget or which spend limited tax dollars to buy more capability than the nation needs...

Second, we must ensure **that requirements are reasonable and technology is adequately mature** to allow the department to successfully execute the programs...

Third, **realistically estimate program costs, provide budget stability** for the programs we initiate, adequately staff the government acquisition team, and provide disciplined and constant oversight.

We must constantly **guard against so-called “requirements creep,” validate the maturity of technology at milestones, fund programs to independent cost estimates, and demand stricter contract terms and conditions.”**

Secretary of Defense Robert M. Gates



Weapons Systems Acquisition Reform



“The key to successful acquisition programs is **getting things right from the start** with sound systems engineering, cost estimating, and developmental testing early in the program cycle. The bill that we are introducing today will require the Department of Defense to take the steps needed to put major defense acquisition programs on a **sound footing from the outset**. If these changes are successfully implemented, they should help our acquisition programs avoid future cost overruns, schedule delays, and performance problems.”

-Senator Carl Levin, Chairman, Senate Armed Services Committee

“The Weapon System Acquisition Reform Act of

Implementation of the Weapon Systems Acquisition Reform Act (WSARA) of 2009

WSARA:

- **Signed by President May 22, 2009 (Public Law 111-23)**
- **Established requirements that directly impact operation of the Defense Acquisition System and duties of key officials**
- **Directive-Type Memorandum (DTM) 09-027, 4 Dec 2009, implements WSARA**
- **DTM amends Acquisition Policy in DoDI 5000.02 the Defense Acquisition Guidebook and the Defense Federal Acquisition Regulation Supplement (DFARS)**
- **The DTM is effective immediately and will be incorporated into the above within 180 days.**

WSARA DTM is available at <http://www.ditc.mil/whs/directives>

Implementation of WSARA Changes to Policy and Procedure

- 1. Analysis of Alternatives Study Guidance**
- 2. Acquisition Strategies to Ensure Competition**
- 3. Competition and Considerations for the Operation and Sustainment (O & S) of Major Weapon Systems**
- 4. Competitive Prototyping**
- 5. Cost Estimation**
- 6. Developmental Test and Evaluation (DT&E)**
- 7. Systems Engineering**
- 8. Performance Assessments and Root Cause Analysis (PARCA)**
- 9. Assessment of MDAP Technologies**
- 10. Preliminary Design Reviews (PDR)**
- 11. Certification IAW 10 USC 2366a and 2366b**
- 12. Critical Cost Growth**

Most apply to MDAPs (ACAT I); some apply to MAIS (ACAT IA); some apply only to MDAPs/MAIS for which USD(AT&L) is MDA (ACAT ID/IAM); some apply to Major Weapon Systems (ACAT II); some apply to non-major programs

Implementation of WSARA AoA Study Guidance

- **Director, Cost Analysis and Program Evaluation (DCAPE)**

- _Leads development of AoA Study Guidance, for

- _Joint requirements for which JROC is validation authority

- **Milestone Decision Authority (MDA) directs initiation of the AoA in Materiel Development Decision (MDD) Acquisition**

- DCAPE consolidates the responsibilities of Dir, Program Analysis & Evaluation (Dir, PA&E) and Chairman, Cost Analysis Improvement Group (CAIG)
 - JROC Validates “JROC Interest” requirements - applies to all potential and designated ACAT I/IA programs and capabilities that have a potentially significant impact on interoperability in allied and coalition operations.
 - *Policy Impact: MDA no longer approves AoA Study Guidance*

Implementation of WSARA Acquisition Strategies to Ensure Competition

- Acquisition strategy for MDAPs must describe measures to ensure competition, or option of competition, at both prime and subcontract level throughout life-cycle
 - Competitive
 - Built-to-print approaches
- Measures may include (if cost effective)
 - Dual-sourcing
 - Technical Data Package (TDP)
 - Unbundling of contracts
 - Competition for subsystem upgrades
 - Funding of next-generation prototypes
 - Licensing of additional suppliers
- Strategy must document rationale for selection of subcontract tier or tiers, and indicate that primes must give consideration to sources other than the
 - Modular, open-architectures
 - Program reviews to address competitive long-term
 - Use of program decisions

Policy Impact: More detailed discussion of competition in acquisition strategy; planning for competition must provide small business with maximum practical opportunity to

Implementation of WSARA

Competition & Considerations for O&S

- **Acquisition strategy for Major Weapon Systems must describe plan for identifying/selecting source of repair**
- **MDA will ensure that, to the maximum extent practicable, and consistent with statutes, maintenance and sustainment contracts are competitively awarded, and**
- **Full consideration for contract award to**
Policy Impact: More detailed discussion of maintenance and sustainment strategy and contracting approach in the acquisition strategy for ACAT I and II programs.
private sector repair activities

Implementation of WSARA Competitive Prototyping

- **Technology Development Strategy (TDS) for MDAPs shall provide for prototypes of the system or, if system prototype is not feasible, for prototypes of critical sub-systems before MS B approval**
 - **MDA may waive if**
 - _ **Cost exceeds life-cycle benefits (constant year dollars), including benefits of improved performance and increased technological and design maturity**
 - _ **DoD would not be able to meet national security objectives without a waiver.**
 - _ **If waived, a prototype still must be produced before MS B approval if expected life cycle benefits exceed cost of the prototype, and production of prototype is**
- Policy Impact: Unless waived under conditions described, competitive prototyping now a statutory requirement for MDAPs*

Implementation of WSARA

Cost Estimation: Role of Director, CAPE

- **Provides policies and procedures for conduct of all DoD cost estimates**
- **Reviews Component cost estimates/analysis conducted for MDAPs & MAIS**
- **Conducts ICE and cost analysis for MDAPs for which USD(AT&L) is MDA in advance of:**
 - _ **Certifications pursuant to 10 USC 2366a (MS A), 2366b (MS B), or 2433a (critical cost growth in MDAPs);**
 - _ **Any decision to enter LRIP or full rate production**
 - _ **As requested by USD(AT&L) or considered appropriate by DCAPE**
- **Conducts ICE and cost analysis for MAIS programs for which the USD(AT&L) is MDA in advance of:**

Implementation of WSARA

Cost Estimation: Role of DCAPE, continued..

- Receives results of all cost estimates/analysis and associated studies conducted by Components for MDAPS and MAIS; has access to all DoD data necessary to review cost analyses and execute DCAPE responsibilities
- Participates in discussions of discrepancies related to MDAP and MAIS cost estimates and comments on deficiencies related to methodology or execution of the estimates
- Concurs with choice of cost estimate used to support the APB and in support of MDAP and MAIS requirements
- Participates in decisions to request multi-year

Policy Impact: Adds requirement for ICE for MDAPs for which the USD(AT&L) is the MDA in advance of MS A Certification, Full Rate Production Decision, and in support of indicated certifications and reports. An ICE will be required for MAIS programs for which USD(AT&L) is the MDA only if there has been a Critical Change

Implementation of WSARA

Dir, DT&E and Dir SE

- **Role of Director, Developmental Test & Evaluation (DT&E)**
 - _ Reviews and approves DT&E plan in the TES and TEMP for MDAPs and all programs on the OSD DT&E Oversight List
 - _ Monitors and reviews DT&E of MDAPs
 - _ Has access to all Component records and data necessary to carry out duties
- **Role of Director, Systems Engineering**
 - _ Reviews and approves the SEP for MDAPs

Policy Impact: Dir, DT&E (instead of USD(AT&L) reviews and approves DT portion of the TES and TEMP; Dir, SE (instead of DUSD(A&T)) reviews and approves SEPs for all MDAPs.

Implementation of WSARA Performance Assessment & Root Cause Analysis (PARCA)

Role of the senior official for PARCA:

- **Conduct performance assessments for MDAPs periodically or when requested by SECDEF, USD(AT&L), Secretary of Military Dept, or head of Defense Agency**
- **Conduct root cause analysis for MDAPs as required by 10 USC 2433a, or when requested by SECDEF, USD(AT&L), Secretary of Military Dept, or head of Defense Agency**
- **Advise acquisition officials on MDAP performance issues:**

**Prior to certification under 10 USC 2433a (critical
Policy Impact: Newly established position to perform required
functions**

Implementation of WSARA

Performance Assessments

- **Evaluate the cost, schedule, and performance of the program, relative to current metrics, performance requirements, and baseline parameters**
- **Determine the extent to which the level of program cost, schedule, and performance relative to established metrics is likely to result in the timely delivery of a level of capability to the warfighter that is consistent with the level of resources to be expended and to provide superior value to alternative approaches that may be available to meet the same requirement**

Implementation of WSARA

Root Cause Analysis

Considers the underlying cause or causes for shortcomings in cost, schedule, and performance including the role, if any, of:

- Unrealistic performance expectations;**
- Unrealistic baseline estimates for cost and schedule;**
- Immature technologies or excessive manufacturing or integration risk;**
- Unanticipated design, engineering, manufacturing, or integration issues arising during program performance;**
- Changes in procurement quantities;**
- Inadequate program funding or funding instability;**

Implementation of WSARA

**Assessment of MDAP
Director of Defense Research and Engineering
(DDR&E) shall:**

- **Independently review, assess, and report on the technological maturity of MDAP technologies in support of MS B reviews, associated statutory certifications, and at other times designated by the USD (AT&L).**
- **Develop knowledge-based standards against which to measure the technological maturity and integration risk of critical technologies at key stages in the**

Policy Impact: DDR&E to independently review, assess, and report the maturity of MDAP technologies prior to MS B Certification. Also, DDR&E will develop standards that will be used to measure and assess the maturity of critical technologies and integration risk in MDAPs

Implementation of WSARA

Preliminary Design

- **PDRs before MS B are mandatory for all MDAPs**
 - _ Reflected in Technology Development Strategy (TDS) to be approved by the MDA at MS A.
 - _ Post-PDR assessments conducted in association with MS B preparations and will be considered by the MDA at MS B certification review.
 - **PDRs before MS B for other than MDAPs will be approved by the MDA when consistent with TDS or Acquisition Strategy objectives.**
 - _ PDR conducted before MS B: a post-PDR assessment will be conducted in association with
- Policy Impact: PDR before MS B is statutory requirement for MDAPs. Post-PDR Assessment will be conducted during MS B review, and prior to 2366b certification.*

Implementation of WSARA Program Certifications IAW 10 USC 2366a and 2366b

- Requirements for MDA program certification at Milestone A (10 USC 2366a) and MS B (10 USC 2366b) were amended
- Ongoing MDAPs initiated prior to 22 May 2009 and will not have received a MS A certification or MS B certification prior to May 22, 2010, must receive a MS A certification NLT May 22, 2010
- Any MDAP that received a MS B approval prior to January 6, 2006, and has not yet received a MS C approval, the MDA, not later than February 16, 2010, must determine who the

Policy Impact: The MS A and MS B Certification requirements have changed. Required statements for the ADM, and changes to the certification statements are highlighted on following charts.

Implementation of WSARA Program Certifications IAW 10 USC 2366a and 2366b

Following statements must be added to the ADM:

MS A: “I have reviewed the program and have made the certifications required by Section 2366a of Title 10, United States Code. At any time prior to Milestone B approval, the Program Manager shall notify me immediately if the projected cost of the program exceeds the cost estimate for the program at the time of Milestone A certification by at least 25 percent or the PM determines that the period of time required for the delivery of an initial operational capability is likely to exceed the schedule objective provided at the time of Milestone A certification by more than 25 percent.”

MS B: “I have reviewed the program and the business case analysis and have made the certifications required, or executed a waiver of the applicability of one or more of the components of the certification requirement as authorized by Section 2366b of Title 10, United States Code. The Program Manager shall notify me immediately of any changes to the program that alter the substantive basis for the certification

Implementation of WSARA Program Certification for MS A (10 USC 2366a)

MEMORANDUM FOR THE RECORD

SUBJECT: Milestone A Program Certification

As required by Section 2366a of Title 10, United States Code, I have consulted with the Joint Requirements Oversight Council (JROC) on matters related to program requirements and military needs for the *(name of program)* and certify that:

- (1) the program fulfills an approved initial capabilities document;
- (2) the program is being executed by an entity with a relevant core competency as identified by the Secretary of Defense;
- (3) ***an analysis of alternatives has been performed consistent with the study guidance developed by the Director of Cost Assessment and Program Evaluation;***
- (4) a cost estimate for the program has been submitted, ***with the concurrence of the Director of Cost Assessment and Program Evaluation***, and the level of resources required to develop and procure the program is consistent with the priority level assigned by the JROC; and,

(5) *[include only if the system duplicates a capability already provided by an existing system]* the duplication of capability

Implementation of WSARA Program Certification for MS B (10 USC 2366b)

MEMORANDUM FOR THE RECORD

SUBJECT: Milestone B Program Certification

As required by Section 2366b of Title 10, United States Code,

(1) I have received a business case analysis for the (*name of program*) and certify on the basis of the analysis that:

(A) the program is affordable when considering the ability of the Department of Defense to accomplish the program's mission using alternative systems;

(B) **appropriate trade-offs among cost, schedule, and performance objectives have been made to ensure that** the program is affordable when considering the per unit cost and the total acquisition cost in the context of the total resources available during the period covered by the future-years defense program submitted during the fiscal year in which the certification is made;

(C) reasonable cost and schedule estimates have been developed to execute, **with the concurrence of the Director of Cost Assessment and Program Evaluation**, the product development and production plan under the program;

(D) funding is available to execute the product development and production plan under the program, through the period covered by the future-years defense program submitted during the fiscal year in which the certification is made, consistent with the estimates described in paragraph (C) for the program; and

Implementation of WSARA Program Certification for MS B (10 USC 2366b), continued..

(3) I further certify that:

(A) appropriate market research has been conducted prior to technology development to reduce duplication of existing technology and products;

(B) the Depart of Defense has completed an analysis of alternatives with respect to the program;

(C) the Joint Requirements Oversight Council has accomplished its duties with respect to the program pursuant to section 181(b) of Title 10, including an analysis of the operational requirements for the program;

(D) the technology in the program has been demonstrated in a relevant environment, ***as determined by the Milestone Decision Authority on the basis of an independent review and assessment by the Director of Defense Research and Engineering; and***

(E) the program complies with all relevant policies, regulations, and directives of the Department of Defense.

Changes highlighted in ***bold blue italics***

Implementation of WSARA Critical Cost Growth (1)

DTM contains policy implementing new 10 USC 2433a, Critical Cost Growth of MDAPs, that amends 10 USC 2433, Unit Cost Reports, and supersedes all previous USD(AT&L) policies addressing actions that must be taken following critical cost growth of a MDAP or designated subprogram

- **PM shall notify the CAE immediately, whenever there is a reasonable cause to believe that the current estimate of either the program acquisition unit cost (PAUC) or average procurement unit cost (APUC) of a MDAP or designated subprogram (in base-year dollars) has increased by 25 percent (or more) over the PAUC or APUC objective of the currently approved APB estimate, or 50 percent (or more) over the PAUC or APUC of the original APB estimate.**

- **If the CAE determines that there is an increase in the current estimate of the PAUC or APUC of at least 25 percent over the PAUC or APUC objective of the currently**

Implementation of WSARA

Critical Cost Growth (2)

- If the Component Head subsequently determines that there is, in fact, an increase in the current estimate of the PAUC or APUC of at least 25 percent over the currently approved APB, or 50 percent over the PAUC or APUC of the original APB, the Head of the DoD Component shall notify Congress, in writing, of the determination of critical cost growth and the increase with respect to the program or subprogram concerned.
- The notification shall be not later than 45 days after the end of the quarter, in the case of a quarterly report; or not later than 45 days after the date of the report, in the case of an out-of-cycle report based on critical change occurring between quarters. In either case, notification shall include the date that the Head of the DoD Component made the determination.
- In addition, the Component Head shall submit an SAR for either the fiscal year quarter ending on or after the determination date, or for the fiscal year quarter that immediately precedes the fiscal year quarter ending on

Implementation of WSARA

Critical Cost Growth (3)

- **The USD(AT&L), after consultation with the JROC, shall determine the root cause or causes of the critical cost growth in accordance with applicable statutory requirements and DoD policies, procedures, and guidance based upon the root cause analysis conducted by the senior official for PARCA; and in consultation with the DCAPE, shall carry out an assessment of:**
 - a. The projected cost of completing the program if current requirements are not modified.**
 - b. The projected cost of completing the program based on reasonable modification of such requirements.**
 - c. The rough order of magnitude of the costs of any reasonable alternative system or capability.**
 - d. The need to reduce funding for other programs due to the growth in cost of the program.**

Implementation of WSARA

Critical Cost Growth (4)

- **After conducting the reassessment, the USD(AT&L) shall terminate the program unless the USD(AT&L) submits a written certification to Congress before the end of the 60-day period beginning on the day the SAR containing the unit cost information is required to be submitted to Congress. The certification must state:**
 - a. The continuation of the program is essential to the national security.**
 - b. There are no alternatives to the program that will provide acceptable capability to meet the joint military requirement (as defined in section 181(g)((1) of Title 10, U.S.C) at less cost.**
 - c. The new estimates of the PAVC or APUC have been determined by the DCAPE, to be reasonable.**
 - d. The program is a higher priority than programs whose funding must be reduced to accommodate the growth in cost of the program.**

Implementation of WSARA

Critical Cost Growth (5)

- **The written certification shall be accompanied by a report presenting the root cause analysis and assessment and basis for each determination made in accordance with the five certification criteria listed previously**
- **If the USD(AT&L) elects NOT to terminate a MDAP that has experienced critical cost growth, the Secretary of Defense shall:**
 - a. Restructure the program in a manner that addresses the root cause or causes of the critical cost growth, and ensures that the program has an appropriate management structure as set forth in the written certification;**
 - b. Rescind the most recent milestone approval for the program or designated subprograms and withdraw any associated certification(s) pursuant to section 2366a or 2366b.**
 - c. Require a new milestone approval for the program or designated subprograms before taking any contract action to enter a new contract, exercise an option under an existing contract, or otherwise extend the scope of an existing contract under the program, except to the extent determined necessary by the MDA, on a non-delegable basis, to ensure that the program can be restructured as intended by the Secretary of Defense without unnecessarily wasting resources.**

Implementation of WSARA

Critical Cost Growth (6)

- **Additionally, for each MDAP that has exceeded the critical cost thresholds, but has not been terminated, the senior official for PARCA shall conduct semi-annual reviews until 1 year after the date a new milestone approval is received. The senior official for PARCA, shall report the results of the semi-annual reviews to the USD(AT&L) and summarize the results in the Director's next annual report.**
- **If a MDAP is terminated after experiencing a critical cost breach, the USD(AT&L) shall submit to Congress a written report with the following information:**
 - a. An explanation of the reasons for terminating the program.**
 - b. The alternatives considered to address any problems in the program.**
 - c. The course the Department of Defense plans to pursue to meet any continuing joint military requirements otherwise intended to be met by the program.**

Implementation of WSARA

Revised MDAP Definition

A MDAP is a Department of Defense acquisition program that is not a highly sensitive classified program and:

a. that is designated by the USD (AT&L) as an MDAP; or

b. that is estimated to require an eventual total expenditure for research, development, test, and evaluation, *including all planned increments, of more than \$365M (based on fiscal year 2000 constant dollars) or an eventual total**

*Policy Impact: The revised definition may result in a change in MDA expenditure for procurement, *including**

****all planned increments****, of more than*

Other WSARA Changes Not Directed by the D

- **The organizational changes required by WSARA sections 101 and 102 were implemented in the following memos:**
 - 1. DEPSECDEF Memorandum for Distribution, subject: Initial Implementation Guidance for the Office of the Director of Cost Assessment and Program Evaluation, 9 Jun 2009. Directed establishment of new Presidentially appointed, Senate confirmed position and transferred all functions of the Office of the Director of Program Analysis and Evaluation to the new office.**
 - 2. USD(AT&L) Memorandum for OUSD(AT&L) Component Heads, subject: Organizational Changes, 23 Jun 2009. Implemented move of SE and DT&E from DUSD(A&T) to DDR&E.**
 - 3. DDR&E Memorandum for Offices of the DDR&E, subject DDR&E Reorganization, 21 Aug 2009. Directed internal realignments for DDR&E.**